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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of : Kipnis et al.

RECEIVED

Serial No. : 09/552,115

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Group 2100

5 For : PUBLIC-KEY SIGNATURE METHODS AND SYSTEMS

Group Art Unit: Not Yet Assigned

Examiner: Not Yet Assigned

Hon. Commissioner of Patents and Trademarks

Washington, D.C. 20231

10 Sir:

PRELIMINARY AMENDMENT

In order to place the application in better condition for examination,  
kindly amend the above identified application as follows:

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In the specification:

Page 2, kindly add after the words "September 1997." that end the  
second full paragraph:

20 --In the basic form of the "Oil and Vinegar" scheme computation of a signature x  
of y is performed as follows:

Step 1:  $y = (y_1, \dots, y_n)$  is transformed into  $b = (b_1, \dots, b_n)$  such that  $b = t^{-1}(y)$ , where  $t$   
is the secret, bijective, and affine function from  $K^n$  to  $K^n$ .

B' 25 Step 2: We find n variables  $a_1, \dots, a_n$  of  $K$ , and n variables  $a'_1, \dots, a'_n$  of  $K$ , such that  
the n equations (S) are satisfied:

$$\forall i, 1 \leq i \leq n, \quad b_i = \sum \gamma_{ijk} a_j a'_k + \sum \lambda_{ijk} a'_j a'_k + \sum \xi_{ij} a_j + \sum \xi'_{ij} a'_j + \delta_i. \quad (S)$$

This can be done as follows: we choose at random the n variables  $a'_i$ , and then we  
compute the  $a_i$  variables from (S) by Gaussian reductions (because - since there are